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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,902	07/30/2003	Bernhard Klingseis	449122060200	6251

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EXAMINER	
TRIEU, THAI BA	
ART UNIT	**PAPER NUMBER**
3748	

DATE MAILED: 05/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/629,902	KLINGSEIS, BERNHARD	
	Examiner	Art Unit	
	Thai-Ba Trieu	3748	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-7 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-4,6 and 7 is/are rejected.

7)☒ Claim(s) 5 is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

For the purpose of this Office Action, the claims 1-7 will be examined as best understood by the examiner.

Specification

The disclosure is objected to because of the following informalities:

- On Page 4, line 28, **-- 24 --** should be inserted after ***"a re-flow flap"***.

- Applicant should elect only one of the following terms: ***"flap 40"*** (See Page 5, line 31), or ***"throttle flap 40"*** (See Page 5, line 33), or ***"waste gate flap 40"*** (See Page 6, lines 1, 7, and 10), or ***"throttle valve 40"*** (See Page 6, line15) to disclose the element "40", in order to keep the whole specification be consistent.

- On Page 7, lines 29-37, ***"throttle valve"*** should be labeled with a number, since it is not clear that which throttle valve applicant want to reference to, such as air intake throttle valve, or waste gate throttle valve.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Hayashi (Patent Number 5,960,631).

Hayashi discloses a method for determining a boost pressure set-point in an internal combustion engine (1) comprising an exhaust gas turbocharger (10) having a bypass line (24) running parallel to a turbine (20) in an exhaust gas duct (23, 19), the bypass line (24) having a waste-gate (26) which is set via a pneumatically, hydraulically or electrically operated actuator (25), comprising:

limiting the set-point for the boost pressure minimum value (See Abstract, Column 1,lines 17-35); and

determining the minimum value from the sum of environmental pressure and one or more pressure constants (See Abstract);

wherein a speed-dependent basic value is added as a pressure constant the environmental pressure (See Abstract, Column 1,lines 17-35);

with a throttle valve deactivated and the waste-gate closed, an additional pressure constant is determined and then added to the environmental pressure and' the basic value (See Column 5, lines 50-56);

wherein the additional pressure constant is adaptively corrected as a function of the measured boost pressure (See Column 7, lines 40-67, and Column 8, lines 1-60);

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 6-7 rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi (Patent Number 5,960,631), in view of Nytomt (Patent Number 5,600,956).

Hayashi discloses the invention as recited above, and further disclose an actuator (25) for the waste-gate (26) (See Figure 1, Column 5, lines 66-67, and Column 6, lines 1-10); however, fails to disclose a diaphragm box being controlled by overpressure and under-pressure being provided as an actuator for the waste-gate and pre-tensioned by a means of a spring into a position that closes the waste gate.

Nytomt teaches that it is conventional in the art of controlling charge pressure in a supercharged internal combustion engine, to utilize a diaphragm box (12) controlled by overpressure and under-pressure being provided as an actuator for the waste-gate (10), the diaphragm box (12) being mechanically linked to the waste-gate (10) and being pre-tensioned by a means of a spring (13) into a position that closes the waste gate (See Figure 1, Column 2, lines 22-26).

It would has been obvious to one having ordinary skill in the art at that time the invention was made, to have utilized a diaphragm box being controlled by overpressure and under-pressure being provided as an actuator for the waste-gate and pre-tensioned by a means of a spring into a position that closes the waste gate, as taught by Nytomt, to improve the charge pressure control, in the Hayashi device.

Allowable Subject Matter

Claim ***5*** is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Watanabe (US Patent Number 5,899,069) discloses a supercharged internal combustion engine.

- Cipolla (US Patent Number 4,597,264) discloses a regulation device for a turbo compressor unit for supercharging internal combustion engine.

- Free et al. (US Patent Number 5,755,101) disclose an electronic turbocharger waste gate controller.

- Wang et al. (US Patent Number 6,619,261 B1) disclose a system for controlling an operating condition of an internal combustion engine.

- Mueller (US Patent Number 3,941,035) discloses a control unit and method.

- Berger et al. (US Patent Number 5,121,604) disclose a control of supercharged internal combustion engines.

- Detweiler (US Patent Number 4,286,433) discloses a control system for a turbocharger.

- Sumizawa et al. (US Patent Number 4,748,567) disclose a method of performing a fail-safe control for an engine and a fail-safe control unit thereof.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai-Ba Trieu whose telephone number is (703) 308-6450. The examiner can normally be reached on Monday - Thursday (6:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion can be reached on (703) 308-2623. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TTB
May 19, 2004

Thai-Ba Trieu
Patent Examiner
Art Unit 3748